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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,207	09/01/2004	Jeffrey R. Martin	FLWP101US	5206
24041	7590	03/30/2006	EXAMINER	
SIMPSON & SIMPSON, PLLC 5555 MAIN STREET WILLIAMSVILLE, NY 14221-5406			KRISHNAMURTHY, RAMESH	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 03/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/711,207

Applicant(s)

MARTIN ET AL.

Examiner

Ramesh Krishnamurthy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/01/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01/07/05</u> . | 6) <input type="checkbox"/> Other: _____ |

This office action is responsive to communications filed 01/07/2005.

Claims 1 – 23 are pending.

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the Claimed feature (claim 16, for example) of the reservoir dome being remote from said main valve body must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 6, 8 – 12, 14 and 16 – 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Lai (US 6,220,280).

Lai discloses (Figs, 1, 2A, 2B, 3A, 3B) a surge relief valve comprising: a main valve body (14) comprising a dome port (56) and an inlet port (38) wherein said inlet port is in fluid communication with a first fluid and an outlet port (42); a dome reservoir (16) connected to said main valve body but disposed remotely therefrom via said dome port and arranged to hold a second fluid that could be Nitrogen; a piston (58) located in said main valve body and comprising a piston in fluid communication with said reservoir, wherein said first fluid exerts an upward force on said piston, said second fluid exerts a downward force on said piston, and said piston is arranged to move in response to a differential in said upward and downward forces, wherein said first and second fluids are isolated from one another. A self-relieving pressure regulator (154) is connected to the main valve body via the dome reservoir (16). Lai discloses a piping arrangement (72) with a first end connected to the dome reservoir (16) and a second connected to the

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dome port (56). The disclosure of Lai is applicable to all types of first fluid including a process fluid that is a liquid that could further be either oil or petroleum oil.

It is noted that the arrangement disclosed by Lai necessarily performs the method recited in claims 17 – 22 in its usual and normal operation.

4. Claims 1 – 6, 8 – 15 and 17 – 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Kugelev et al. (US 6,978,799).

Kugulev et al. discloses (Figs, 1 - 4) a surge relief valve comprising: a main valve body (13) comprising a dome port (33) and an inlet port (15) wherein said inlet port is in fluid communication with a first fluid and an outlet port (17); a dome reservoir (47) connected directly to said main valve body via said dome port and arranged to hold a second fluid that could be Nitrogen; a piston (25) located in said main valve body and comprising a piston in fluid communication with said reservoir, wherein said first fluid exerts an upward force on said piston, said second fluid exerts a downward force on said piston, and said piston is arranged to move in response to a differential in said upward and downward forces, wherein said first and second fluids are isolated from one another. A self-relieving pressure regulator (Fig. 1) is connected to the main valve body via the dome reservoir (47). Kugulev et al. discloses a piping arrangement (55, 73) with a first end (73) connected to the dome reservoir (47) and a second connected to the dome port (33). The disclosure of Kugulev et al. is applicable to all types of first fluid including a process fluid that is a liquid which could further be either oil or petroleum oil (See Col. 1, lines 22 – 30, for example).

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It is noted that the arrangement disclosed by Kugulev et al. necessarily performs the method recited in claims 17 – 22 in its usual and normal operation.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 7 and 23 are rejected under 35 U.S.C. 102(b) as anticipated by Lai (US 6,220,280) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lai (US 6,220,280) in view of Steinert et al. (US 5,174,326).

The patent to Lai discloses a pressure regulator (154) that is believed to maintain the second fluid at a specified pressure in response to changes in ambient temperature, since the pressure regulator is stated (Col. 5, line 65 – Col. 6, line 2) to provide a constant pressure which here is taken to include under all known conditions including the commonly encountered ambient temperature changes.

However, should it be determined that the pressure regulator (154) in Lai does not maintain the second fluid at a specified pressure in response to changes in ambient temperature, it would have been obvious to provide such a feature since such is essential in using the system of Lai under conditions where ambient temperatures could change as evident from Steiner et al.

8. Claims 7 and 23 are rejected under 35 U.S.C. 102(e) as anticipated by Kugulev et al. (US 6,978,799) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kugulev et al. (US 6,978,799) in view of Steinert et al. (US 5,174,326).

The patent to Kugulev et al. discloses a pressure regulator (Fig. 1) that is believed to maintain the second fluid at a specified pressure in response to changes in ambient temperature, since the pressure regulator is stated (Col. 5, lines 63 - 65) to provide a constant pressure which here is taken to include under all known conditions including the commonly encountered ambient temperature changes.

However, should it be determined that the pressure regulator (Fig. 1) in Kugulev et al. does not maintain the second fluid at a specified pressure in response to changes in ambient temperature, it would have been obvious to provide such a feature since such is essential in using the system of Kugulev et al. under conditions where ambient temperatures could change as evident from Steiner et al.

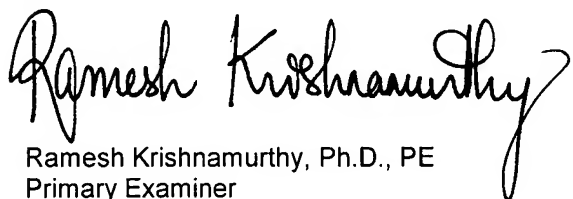
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh Krishnamurthy whose telephone number is (571) 272 - 4914. The examiner can normally be reached on Monday - Friday from 10:00 AM to 6:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel, can be reached on (571) 272 – 4929. The fax phone number for the organization where this application or proceeding is assigned is (571) 273 – 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Ramesh Krishnamurthy". The signature is fluid and cursive, with the first letter of each word being capitalized and prominent.

Ramesh Krishnamurthy, Ph.D., PE
Primary Examiner
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